

AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Clean Water Act, as amended, (33 U.S.C. §§1251 et seq.; the "CWA"), and the Massachusetts Clean Water Act, as amended, (M.G.L. Chap. 21, §§ 26-53)

**The Gillette Company
One Gillette Park
Boston, MA 02127**

is authorized to discharge from the facility located at

**The Gillette Company
One Gillette Park
Boston, MA 02127**

to receiving water named

**Fort Point Channel
(Boston Harbor Basin, MA70-02)**

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

This permit shall become effective on the date of signature.

This permit and the authorization to discharge expire at midnight, five (5) years from the effective date.

This permit supercedes the permit issued on December 24, 1996, as modified September 3, 1998.

This permit consists of 8 pages in Part I including effluent limitations, monitoring requirements, and state permit conditions, and 35 pages in Part II including General Conditions and Definitions.

Signed this 17th day of September, 2003

SIGNATURE ON FILE

Director
Office of Ecosystem Protection
Environmental Protection Agency
Boston, MA

Director
Division of Watershed Management
Department of Environmental Protection
Commonwealth of Massachusetts
Boston, MA

EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

- During the period beginning on the effective date of the permit and lasting through expiration, the permittee is authorized to discharge through **Outfalls 001, 002, 003, and 004**: Storm water, non-contact cooling water, boiler blowdown. Such discharges shall be limited and monitored by the permittee as specified below:

OUTFALL 001 - Non-contact cooling water, process water, and Storm water

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Average Monthly	Maximum Daily	Measurement Frequency	Sample Type ^{1,2}
Flow Rate (million gallons per day)	Report	26.0	1/Day	Estimate
Temperature (°F)	Report	83	5/Week	Grab
pH Range (SU)	6.5 to 8.5 ⁴		5/Week	Grab

OUTFALL 002 - Non-contact cooling water

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Average Monthly	Maximum Daily	Measurement Frequency	Sample Type ^{1,2}
Flow Rate (million gallons per day)	Report	26.0 ⁵	1/Day	Estimate
Temperature (°F)	Report	83	5/Week	Grab
pH Range (SU)	6.5 to 8.5 ⁴		5/Week	Grab

Continued on Page 3.

Effluent Limits Continued

OUTFALL 003 - Non-contact cooling water, process water, and storm water³

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Average Monthly	Maximum Daily	Measurement Frequency	Sample Type ^{1,2}
Flow Rate (million gallons per day)	Report	8.1	1/Day	Estimate
Temperature (°F)	Report	83	5/Week	Grab
pH Range (SU)	6.5 to 8.5 ⁴		5/Week	Grab

OUTFALL 004 - Non-contact cooling water and Storm water

Effluent Characteristic	Discharge Limitations		Monitoring Requirements	
	Average Monthly	Maximum Daily	Measurement Frequency	Sample Type ^{1,2}
Flow Rate (million gallons per day)	Report	17.0 ⁵	1/Day	Estimate
Temperature (°F)	Report	83	5/Week	Grab
pH Range (SU)	6.5 to 8.5 ⁴		5/Week	Grab

Total Cooling Water Intake

Influent Characteristic	Discharge Limitations		Monitoring Requirements	
	Average Monthly	Maximum Daily	Measurement Frequency	Sample Type ^{1,2,3}
Flow Rate (million gallons per day)	Report	60.1	Continuous	Meter

Allll samples shall be tested using the analytical methods found in 40 CFR §136, or alternative methods approved by EPA in accordance with the procedures in 40 CFR §136. The permittee shall submit the results to EPA of any additional testing done to that required herein if it is conducted in accordance with EPA approved methods, consistent with the provisions of 40 CFR §122.41(l)(4)(ii).

- 2) The permittee shall sample from the locations stated in the table below. Any change in sampling location(s) must be reviewed and approved in writing by EPA and MADEP.

SAMPLING LOCATIONS				
Outfall	Parameter	Sample Type	Frequency	Sampling Location
001	Flow	Estimate	1/Day Av & Max*	Outfall 001
001	Temperature Max	Grab	5/Week**	End of Pipe
001	pH	Grab	5/Week**	End of Pipe
002	Flow	Estimate	1/Day Av & Max*	Outfall 002
002	Temperature Max	Grab	5/Week**	End of Pipe
002	pH	Grab	5/Week**	End of Pipe
003	Flow	Estimate	1/Day Av & Max*	Outfall 003
003	Temperature Max	Grab	5/Week**	North Dock Sample Port
003	pH	Grab	5/Week**	North Dock Sample Port
004	Flow	Estimate	1/Day Av & Max*	Outfall 004
004	Temperature Max	Grab	5/Week**	End of Pipe
004	pH	Grab	5/Week**	End of Pipe
INFLUENT COOLING WATER PUMPING RATES				
CWIS***	Flow Rate	Recorder	Daily Total	Pump House

* Report the monthly average, and daily maximum flow rates

** Sample five days per week, Monday though Friday

*** The permittee shall record the total daily influent at the Cooling Water Intake Structure (CWIS) Pump House.

- 3) The Massachusetts Highway Department is responsible for the storm water component of

this discharges until the Department returns full control of the construction easement area to The Gillette Company. The storm water is permitted under MA Highways's NPDES permit No. MA0033928.

- 4) If the pH at any outfall exceeds the maximum pH value of 8.5 SU, the permittee may take an influent pH sample at the pump house to demonstrate that the pH exceedance is the result of influences beyond the permittee's control. If the effluent and influent pH sample results are within 0.1 standard unit, a pH of greater than 8.5 SU will not be determined to be a violation of the permit limits.
- 5) Flow volumes may be diverted from Outfall 004 to Outfall 002, when Outfall 004 is taken offline. The total combined discharge from the two outfalls may not exceed 26 MGD.

Part I.A. (Continued)

- a. There shall be no discharge of floating solids or visible foam in other than trace amounts.
- b. Pollutants which are not limited by this permit, but which have been specifically disclosed in the permit application, may be discharged up to the frequency and level disclosed in the application, provided that such discharge does not violate Section 307 or 311 of the Clean Water Act (CWA) or applicable state water quality standards.
- c. The effluent shall not contain materials in concentrations or in combinations which are hazardous or toxic to aquatic life or which would impair the uses designated by the classification of the receiving waters.
- d. Discharges shall be adequately treated to insure that the surface water remains free from pollutants in concentrations or combinations that settle to form harmful deposits, float as foam, debris, scum or other visible pollutants. They shall be adequately treated to insure that the surface waters remain free from pollutants which produce odor, color, taste, or turbidity in the receiving water which is not naturally occurring and would render it unsuitable for its designated uses.
- e. The permittee shall maintain a current Spill Prevention Control and Countermeasure Plan (SPCC) and periodically update such plan as necessary under the provisions of 40 CFR §112.1(e).
- f. Changes to equipment or processes that result in significant increases to the heat load discharged from any outfall are cause for reopening the permit for possible modification of the temperature limitations.
- g. All existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Director as soon as they know or have reason to believe (40 CFR §122.42):
 - (1) That any activity has occurred or will occur which would result in the discharge,

on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"

- (a) One hundred micrograms per liter (100 ug/l);
 - (b) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR §122.21(g)(7); or
 - (c) Any other notification level established by the Director in accordance with 40 CFR §122.44(f) and Massachusetts regulations.
- (2) That any activity has occurred or will occur which would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
- (a) Five hundred micrograms per liter (500 ug/l);
 - (b) One milligram per liter (1 mg/l) for antimony;
 - (c) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR §122.21(g)(7); or
 - (d) Any other notification level established by the Director in accordance with 40 CFR §122.44(f) and Massachusetts regulations.
- (3) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the permit application.

B) BIOLOGICAL MONITORING

Within three months of the issuance of the permit, the permittee shall, in consultation with MA DMF, DEP, and EPA, develop a biomonitoring program and submit for agency approval a biomonitoring program. Upon receipt of a notice to proceed from EPA, the permittee shall implement the program, including any changes required by the agencies. At a minimum, the program shall address the following:

Occurrence and Abundance of Species Entrained

1. Entrainment monitoring shall commence by May 15 and continue through September 30. Entrainment monitoring shall consist of the collection of plankton samples that coincide with high tide.
2. Two entrainment samples shall be collected each sampling week between May 15 and June 15. From June 15 to August 31 three entrainment samples will be collected each sampling week. From August 31 to September 30 two entrainment samples will be collected each sampling week.
3. Sampling will be conducted through oblique tows of a 60 cm diameter plankton net with a mesh size of 0.333 mm. The total volume of water filtered per tow shall be no less than 100 m³. The tows will be obtained between the Northern Avenue bridge and the intake structure.
4. Larval American lobster and larval winter flounder shall be enumerated for all life stages. Larval stage entrainment shall be converted to adult equivalents when regional survival rates are available.

C. AMBIENT AND MIXING ZONE TEMPERATURE MONITORING

Within thirty (30) days of the effective date of this permit, the permittee shall install two strings of thermistors from bridges in the Fort Point Channel. The permittee shall install one thermistor string from the West side of the Northern Avenue Bridge to measure ambient water temperatures at the mouth of the Channel, outside the designated temperature mixing zone. A second thermistor string shall be suspended from the West side of the Congress Street Bridge. Each string shall be equipped with a data logging device to allow the development of a continuous data record. The temperature monitoring equipment shall remain in place long enough to confirm the validity of the COMIX model used to establish the temperature mixing zone. The permittee shall continue collecting data from the two stations until receipt of written authorization by EPA to discontinue such monitoring. The permittee is solely responsible for gaining all permits and authorizations necessary for the placement of the temperature monitoring strings in the Fort Point Channel. The data shall be reported to EPA and DEP quarterly. The data shall be submitted with the Discharge Monitoring Report for the month following the end of each calendar quarter: April, July, October, and January.

D. MONITORING AND REPORTING

Monitoring results obtained during the previous month shall be summarized for each month and reported on separate discharge monitoring report (DMR) forms postmarked no later than the 15th day of the month following the effective date of the permit.

Signed and dated originals of these, and all other reports required herein, shall be submitted to the Director and the State at the following addresses:

U.S. Environmental Protection Agency
Water Technical Unit (SEW)
P.O. Box 8127
Boston, Massachusetts 02114

The State Agency is:

Massachusetts Department of Environmental Protection
Northeast Regional Office
Bureau of Waste Prevention
1 Winter Street
Boston, MA 02108

In addition, copies of all Discharge Monitoring Reports shall be submitted to the following address:

Massachusetts Department of Environmental Protection
Division of Watershed Management
Surface Water Discharge Permit Program
627 Main Street
Worcester, MA 01608

E. STATE PERMIT CONDITIONS

This discharge permit is issued jointly by the U. S. Environmental Protection Agency (EPA) and the Massachusetts Department of Environmental Protection (MA DEP) under federal and state law, respectively. As such, all the terms and conditions of this permit are hereby incorporated into and constitute a discharge permit issued by the Commissioner of the MA DEP pursuant to M.G.L. Chap. 21, §43.

Each agency shall have the independent right to enforce the terms and conditions of this permit. Any modification, suspension or revocation of this permit shall be effective only with respect to the agency taking such action, and shall not affect the validity or status of this permit as issued by the other agency, unless and until each agency has concurred in writing with such modification, suspension or revocation. In the event any portion of this permit is declared invalid, illegal or otherwise issued in violation of state law such permit shall remain in full force and effect under federal law as an NPDES Permit issued by the U.S. Environmental Protection Agency. In the event this permit is declared invalid, illegal or otherwise issued in violation of federal law, this permit shall remain in full force and effect under state law as a permit issued by the Commonwealth of Massachusetts.